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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,106	03/03/2004	Chao-Kang Li	250128-1010	4094

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EXAMINER

BUI, HUNG S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/792,106

Applicant(s)

LI, CHAO-KANG

Examiner

Hung S. Bui

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 19-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 19-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02/24/2006.

Claim Objections

2. Claim 18 is objected to because of the following informalities: Claim 18, line 2, there is no antecedent basic for "the electronic device." Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10, 12-14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Scholder et al. [US 5,457,608].

Regarding claims 1 and 13, Scholder et al. disclose a mounting assembly (figures 1-6) for fixing a main board (12) on a housing (14, figure 1), comprising:

- a base (22) having a first engaging portion (24a, 24b, figure 2); and

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- a clip (40) disposed in the base slidably in a first direction (a direction moves to rightforward, figure 1), and a second opposite direction, wherein when moving in the first direction, the clip fixes the main board, and in the second direction, releases the main board; the clip comprising:
 - o a second engaging portion (70, figures 3 and 5) engaging the first engaging portion to limit the clip to only the first direction; and
 - o an actuating portion (42, 44) releasing the first and second engaging portions, when receiving a force, enabling the clip to be moved in either the first direction or the second direction.

Regarding claim 2, Scholder et al. disclose a locating member (46, 49, figure 2) being provided on the base to slidably dispose the clip on the base (figure 5).

Regarding claim 3, Scholder et al. disclose the locating member having two tracks (46, figure 4).

Regarding claim 4, Scholder et al. disclose the first engaging portion (24a, 24b) comprising at least one rack with series of teeth (figures 4-5).

Regarding claim 5, Scholder et al. further disclose the number of racks of the first engaging portion being increased or decreased to enable fine-tuning of the position of the clip.

Regarding claim 6, Scholder et al. further disclose wherein the number of teeth of the racks is increased or decreased to enable fine-tuning of the position of the clip.

Regarding claim 7, Scholder et al. disclose the first engaging portion comprising two adjacent racks (both sides with 24a, 24b, figure 2), with a series of teeth, staggered and not overlapping, to provide fine-tuning of the position of the clip (figure 2).

Regarding claim 8, Scholder et al. disclose the number of racks of the first engaging portion being increased or decreased to enable fine-tuning of the position of the clip.

Regarding claim 9, Scholder et al. disclose the number of teeth of the rack being increased or decreased to enable fine-tuning the position of the clip.

Regarding claim 10, Scholder et al. further disclose the clip including a holding portion (52) to hold the main board (figure 1).

Regarding claim 12, Scholder et al. disclose the holding portion holds the main board at a predetermined height to maintain a distance between the main board and the housing of the electronic device (figure 1).

Regarding claim 14, Scholder et al. disclose the second engaging portion having a plurality of hooks (70, 72, figure 2).

Regarding claim 16, Scholder et al. disclose the first and second engaging portions being deflected in opposite directions (figures 1 and 5).

Regarding claim 17, Scholder et al. disclose the actuating portion releasing the first and second engaging portions by raising the second engaging portion, enabling the clip to be moved in either the first direction or the second direction (figure 1).

Regarding claim 18, Scholder et al. disclose the second direction allowing separation the main board and the electronic device.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scholder et al. in view of Rumney [US 6,752,276].

Regarding claim 11, Scholder et al. disclose the instant claimed invention except for the holding portion having a recess.

Rumney discloses a clip assembly (7) having a holding portion (11) comprising a recess (12, figure 3) to receive a main board (5, figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the holding portion design of Rumney with the holding portion of Scholder et al., for the purpose of completely holding the main board in the housing.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scholder et al. in view of Rumney [US 6,752,276].

Regarding claim 15, Scholder et al. disclose the instant claimed invention except for the second engaging portion comprising a plurality of teeth.

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Hsu et al. disclose a clip assembly (figure 1) having a first engaging portion (45) engaging with a second engaging portion (65), wherein the second engaging portion includes a plurality of teeth (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a plurality of teeth on the second engaging of Scholder et al., as suggested by Hsu et al., in order to increase friction force to hold/retain a board in a fixed position in a housing.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hardt et al. [5,754,406] disclose a printed circuit board card guide having isolation arms and means for securing pcb;
- Hsu et al. [US 5,383,793] disclose adjustable height and position printed circuit board retainer;
- Chang et al. [US 5,996,962] disclose computer card retainer and process for using the same;
- Ruin [US 4,478,331] discloses container for printed circuit boards;
- Shi [US 6,885,565] discloses retention device for expansion cards; and
- Thompson et al. [US 6,021,049] disclose PCI and ISA adapter card guide pincher.


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/29/06
Hung Bui
Art Unit 2841



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